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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,058	06/29/2001	Shigekazu Orita	188-87	9455
28249	7590	11/14/2005	EXAMINER	
DILWORTH & BARRESE, LLP 333 EARLE OVINGTON BLVD. UNIONDALE, NY 11553			TORRES VELAZQUEZ, NORCA LIZ	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/896,058

Applicant(s)

ORITA ET AL.

Examiner

Norca L. Torres-Velazquez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-20 is/are rejected.
- 7) ☒ Claim(s) 1,10 and 12-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 14, 2005 has been entered.

Response to Arguments

2. The objections to the Specification and Claims as stated in Final Office Action mailed May 13, 2005 have been withdrawn in view of Applicant's amendment.

3. Applicant's arguments filed October 14, 2005 have been fully considered but they are not persuasive.

a. With regards to the rejection of claims 1-4 and 6-16 under 35 U.S.C. 112, second paragraph, it is the Examiner's position that the independent claim 1 is still indefinite since it is still not clear what is meant in the third paragraph of claim 1 as currently amended. When reading paragraph 3 of the claim it is not clear what "portions (3)" mean in the claim. It seems that Applicants were trying to define these "portions" but what is provided in the third paragraph of the claim is a fragment of a phrase and fails to define the structure by positively claiming the structure of such portions.

b. New claims 17 and 18 have been included by the amendment. It is noted that new claim 17 recites "consisting of" but depends on claim 1 that uses "comprising" language, therefore claim 17 encompasses the "comprising" language of claim 1. If Applicants

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want to use “consisting of” language to define their invention, they are advised to do it by claiming it in an independent claim.

c. With regards to new claim 18 uses an exclusion limitation: “excluding a foam layer”, however, there is no support in the Specification that expressly supports such limitation. This is rendered new matter.

d. With regards to the rejection under 35 U.S.C. 102(e) over SHIODA et al. (US 6,569,789 B1), Applicants argue that since SHIODA et al. belong to a common assignee with the present application, it cannot be used as a reference against the present application under 35 U.S.C. 102(e)/103. It is noted herein that there is not showing under 37 CFR 1.132 or under 37 CFR 1.131 as required by the rejection mailed on 5/13/05 (page 6, section 7). It is further noted that in order to overcome the rejection, Applicants must properly invoke 103(c).

e. The Examiner applies WO98/06247, published February 12, 1998 as prior art herein and provides US 6,569,789 B1 as the English equivalent for such reference.

f. With regards to arguments on the rejection over ROELL in view of EBNETH, it is maintained herein that at the point of interweaving of the pile thread 5 with the threads 4 of the covering layers 1, 2 of the ROELL reference as illustrated in Figure 9 the pile thread 5 does not constitute a “connection thread” but part of the weave of the covering layers, providing an interruption in the sectional direction of the matrix. Applicant’s amendment to claim 1 is indefinite as to the structure that it is trying to define. As pointed out by the Examiner in the last office action, the present application fails to show

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or disclose in the specification the interweaving of the upper and lower ground structures and their relation with the "connection thread" of the present invention.

g. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Claim Objections

4. Claims 1, 10, 12-17 are objected to because of the following informalities: the claims interchangeably use the terms "connection thread" and "connecting thread". There should be consistency in the language used in the claims. Appropriate correction is required, otherwise this will pose 112(2) issues of lack of antecedent basis. For examining purposes, the Examiner assumes that this was a typographical error and that "connection thread" and "connecting thread" refers to the same structural feature.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

6. Claims 1-4 and 6-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what is meant in Claim 1 by "...at a sectional

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direction of the three dimensionally knitted base material, between the upper and lower ground structures, portions extending between the upper and lower ground structure and an interior therebetwe[e]n...” When reading paragraph 3 of the claim it is not clear what “portions (3)” mean in the claim. It seems that Applicants were trying to define these “portions” but what is provided in the third paragraph of the claim is a fragment of a phrase and fails to define the structure by positively claiming the structure of such portions. It is noted that the use of reference characters is to be considered as having no effect on the scope of the claims. See MPEP § 608.01(m). As stated in the previous action, the language recited in the present amendment is still indefinite since it is still not clear what is meant in the third paragraph of claim 1 as currently amended. Claims 2-4 and 6-20 are also rejected as being dependent on claim 1. Are Applicants trying to say that the “portions” or ‘interior portions’ are provided that extend and interconnect both the upper and lower ground structures?

7. It is further noted, that the word “therebetwen” in third from last line of claim 1 should be corrected to - - therebetween - -.

8. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. New claim 17 recites “consisting of” but depends on claim 1 that uses “comprising” language, therefore claim 17 encompasses the “comprising” language of claim 1. If Applicants want to use “consisting of” language to define their invention, they are advised to do it by claiming it in an independent claim.

9. Claim 1 recites the limitation "the conductive layer" in line 7. There is insufficient antecedent basis for this limitation in the claim. It should recite - - the conductive metal layer - -.

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10. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 19 claims a list of desired properties which are not defined and further the claims fail to indicate to what materials the "improvement" compares to in the prior art.

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claim 18 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Specification does not provide expressed support for the negative limitation "excluding a foam layer".

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

14. Claims 1-4, 6-16 and 19-20 are rejected under 35 U.S.C. 102(a) as being anticipated by SHIODA et al. (WO 98/096247) published February 12, 1998, US 6,569,789 B1 is applied herein as an English equivalent.

15. Claims 1-4, 6-16 and 19-20 are also rejected under 35 U.S.C. 102(e) as being anticipated by SHIODA et al. (US 6,569,789 B1) which has an effective filing date of Feb. 3, 1999.

The applied reference (US 6,569,789 B1), has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

SHIODA et al. teaches a conductive material suitable as a gasket material for shielding the electromagnetic wave. The composite material is composed of a synthetic fiber-structured sheet and a porous synthetic resin sheet integrally bonded to each other and is plate with a metal. (Abstract; claims) The fiber-structured sheets include knit cloths and include an organic fiber.

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(Col. 3, lines 38-41) The reference teaches using a double raschel knit material. (Col. 7, line 44) The porous synthetic resin sheet used in the invention is a soft foamed sheet of three-dimensional network structure. (Col. 3, lines 55-57) The reference teaches using electroless plating to metallise the composite material. (Col. 4, lines 34-37) It is noted that the language of the present invention is open-ended (comprising) and does not preclude the inclusion of the foamed layer taught by the SHIODA et al. reference. With regards to the structure of the knit fabric, it is noted that the reference teaches the use of a double raschel knit material and as stated above, this construction is known to provide the three-dimensional structure claimed herein.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 19-20 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over SHIODA (WO 98/096247).

Although SHIODA does not explicitly teach the properties claimed in claims 19 and 20 it is reasonable to presume that the claimed properties of electromagnetic damping rate and pressure resistance are inherent to the product of SHIODA. Support for said presumption is found in the use of like materials (as disclosed above). The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of pressure resistance and electromagnetic damping rate would obviously have been present one the

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SHIODA product is provided. Note In re Best, 195 USPQ at 433, footnote 4 (CCPA 1977) as to the providing of this rejection made above under 35 USC 102.

18. Claims 1-4 and 7-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over ROELL (US 5,589,245) in view of EBNETH (US 4,201,825) and further evidenced by EP 0748889 A2.

ROELL discloses a textile spacer material that consists of two covering layers 1 and 2, preferably of knitted fabric, which are connected by the pile thread structure 3. (Column 1, lines 48-50) It is noted that the structure taught by ROELL reads on the claimed three dimensionally knitted base material composed of an upper ground structure, a lower ground structure and connection thread interconnecting the two layers. With regards to the heat-fusing thread, it is noted that the ROELL reference teaches that the mechanical and physiological properties of the textile spacer material can be varied depending in the selection of the thread material or other classic process parameter of production. The reference gives as example the use of a temperature sensitive material. (Refer to Column 4, lines 20-38) ROELL further teaches that the textile spacer material can be coated and/or the pile threads can be surface-modified. (Column 4, lines 56-60) ROELL teaches the use of the textile spacer material as a filter material, and indicates that special properties can also be formed by appropriately pre-treating the thread material for the pile thread structure and/or post-treating the textile spacer material. (Column 4, lines 61-65) The reference also teaches that the entire textile spacer material can be impregnated and that a sheathing of the threads can result depending on the type and quantity of the impregnation. (Column 5, lines 4-8)

It is noted that the present application fails to show the interweaving of the upper and lower ground structures and their relation with the "connection thread" of the present invention. Therefore, it is the Examiner's interpretation that at the point of interweaving of the pile thread 5 with the threads 4 of the covering layers 1, 2 of the ROELL reference as illustrated in Figure 9 the pile thread 5 does not constitute a "connection thread" but part of the weave of the covering layers, providing an interruption in the sectional direction of the matrix. It is further included herein a copy of EP 0748889 A2 that illustrates double rib knit Raschel structures to produce space knit-goods that show constructions with the argued interruptions. (Refer to figures)

With regards to claims 8 and 9, it is the Examiner position that the ROELL reference teachings in which the materials used for the pile thread structure are dependent on the intended use of the structure, are broad and would encompass the use of heat-fusing threads with melting points in the range of 100 to 190 °C.

While ROELL teaches post-treating the textile spacer material and that the entire textile spacer material, it fails to specifically teach subjecting the material to an electroless plating with at least one conductive metal.

EBNETH teaches a metallized textile material by currentless metal deposition. (Abstract) The reference teaches coating textile structures such as knitted and woven fabrics. (Column 2, lines 15-20) The reference further teaches using the textile material metallised for the production of antistatically filter cloths and further teaches that it is also possible to use a combination of copper plated and nickel plated wall coverings for electromagnetically screening off rooms from monitoring equipment. Electrical equipment can also be readily screened off from foreign waves and interfering frequencies. (Column 3, lines 36-47) With regard to claims

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10-16, it is the Examiner's position that the structures disclosed by ROELL In Figures 1-9 read on the structures presently claimed.

Since both references are directed to knitted fabrics, the purpose disclosed by EBNETH would have been recognized in the pertinent art of ROELL.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the three dimensional textile spacer fabric of ROELL and provide with a currentless metal deposition of the entire structure with the motivation of producing an electromagnetically screen as disclosed by EBNETH above.

19. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over ROELL and EBNETH as applied to claim 1 above, and further in view of ENG et al. (US 5,532,052).

The ROELL and EBNETH references do not explicitly disclose the use of a Raschel structure.

ENG et al. disclose a camouflage material having radar screening properties comprised of a warp-knitted fabric, so-called Raschel fabric.

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the electromagnetic wave shield and provide it with a Raschel structure with the motivation of producing a light-weight knitted fabric as disclosed by ENG et al. (Refer to Column 1, lines 16-18 and lines 32-33).

20. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over ROELL and EBNETH as applied to claim 1 above, and further in view of SHIODA et al. (WO 98/096247).

The ROELL and EBNETH references do not explicitly disclose the use of a Raschel structure.


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SHIODA et al. teaches a conductive material suitable as a gasket material for shielding the electromagnetic wave. The composite material is composed of a synthetic fiber-structured sheet and a porous synthetic resin sheet integrally bonded to each other and is plate with a metal. (Abstract; claims) The fiber-structured sheets include knit cloths and include an organic fiber. (Col. 3, lines 38-41) The reference teaches using a double raschel knit material. (Col. 7, line 44) It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide a double raschel knit material as a suitable fibrous structure for the EMI since this construction is known to provide a lightweight fabric.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 571-272-1484. The examiner can normally be reached on Monday-Thursday 8:00-5:00 pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Norca L. Torres-Velazquez
Primary Examiner
Art Unit 1771

November 9, 2005